

January 11, 2022

ADEQ Water Quality Compliance Section
Mail Code 5415B-1
1110 West Washington Street
Phoenix, Arizona 85007

Attention: Mr. Tracy Bunch

Subject: Weekly Monitoring Report for Week Ending 1/1/2022
Florence Copper, Production Test Facility
Aquifer Protection Permit No. 101704, LTF 88973

Dear Mr. Bunch:

Florence Copper is submitting this report in accordance with Table 15 of Aquifer Protection Permit (APP) No. 101704.

This report includes In-Situ Best Available Demonstrated Control Technology (BADCT) compliance monitoring that is required to be reported on a weekly basis including:

- Recovered volume to injection volume;
- Inward hydraulic gradient; and
- Maximum injection pressure.

A map showing the location of the PTF injection, recovery, and observation wells is included as Figure 1.

Recovered Volume to Injection Volume

A summary of the injected and recovered volumes for the week of 12/26/2021 to 1/1/2022 and the December monthly average flows are included in Table 1. Observation Wells O-02 and O-03 and Injection Wells I-01, I-02, and I-03, and I-04 were pumped as part of the recovered volumes. Recovery Well R-09 was used as an injection well and its flows were included in the injection volumes. The total injected and recovered volumes, as well as the percent recoveries, are presented on Figure 2. On December 31st, 2021, it was discovered that the flowmeter on recovery well R-01 was transmitting incorrect totalizer data. This problem was traced back to October 14, 2021, when flowmeter calibration was performed in the wellfield. Recovery flow totals for this timeframe were corrected for this well, and the corrected values will be included in the 4th Quarter 2021 Reports. The corrected recovery flow values averaged 5% lower than the previously reported values, and the updated percent recovery calculations did not result in any exceedances.

During the reporting period no exceedance of the alert level was measured for recovered volume to injected volume percent recovery.

Inward Hydraulic Gradient

Table 2 includes a summary of water levels in the recovery and observation well pairs, and the difference in head measurements. Hydrographs showing the water level elevation comparisons for each recovery well and observation well pair are included in Figure 3.

During the reporting period, there were no exceedances of the alert level for the daily average water level comparisons for the inward hydraulic gradient.

Injection Pressure

A summary of the injection pressures during the reporting period is included in Table 3. During the reporting period no alert levels were exceeded for the daily maximum injection pressure.

Please contact me at 520-374-3984 if you require any additional information.

Sincerely,
Florence Copper Inc.



Brent Berg
General Manager

Attachments:
Tables and Figures

cc: Daniel Reeder, ADEQ
Nancy Rumrill, United States Environmental Protection Agency

TABLES

Table 1. Injected and recovered volumes (gallons) for the week of 12/26/2021 to 1/1/2022

Date	Daily Injection Flow (gal)	Daily Recovery Flow (gal)	% Recovery	AL % Recovery Less than
12/26/2021	142600	396400	278	106
12/27/2021	141800	397300	280	106
12/28/2021	142200	374300	263	106
12/29/2021	144800	373600	258	106
12/30/2021	145200	391100	269	106
12/31/2021	142400	396300	278	106
1/1/2022	140900	396600	281	106
Weekly Average	142843	389371	273	106
Avg Flow Rate (gpm)	99	270		

December Monthly Flow Averages	84	227
Monthly Average alert limit max flow (gpm)	240	300

Table 2. Average daily water levels in the recovery and observation well pairs (amsl)

Well Pairs Average Daily Elevation & Gradient (feet)														
	12/26/21		12/27/21		12/28/21		12/29/21		12/30/21		12/31/21		1/1/22	
Well	Elev.	Gradient	Elev.	Gradient	Elev.	Gradient	Elev.	Gradient	Elev.	Gradient	Elev.	Gradient	Elev.	Gradient
R-01	1206.17		1206.26		1208.76		1209.13		1208.20		1207.52		1207.04	
O-01	1213.09	6.92	1213.16	6.91	1215.48	6.72	1216.38	7.25	1215.15	6.95	1213.53	6.01	1213.36	6.32
O-02	1221.43	15.27	1221.48	15.22	1223.27	14.51	1223.99	14.86	1223.12	14.92	1221.47	13.95	1221.54	14.50
R-07	1175.95		1175.90		1178.42		1179.37		1177.89		1175.23		1174.90	
O-01	1213.09	37.14	1213.16	37.26	1215.48	37.06	1216.38	37.01	1215.15	37.26	1213.53	38.30	1213.36	38.46
O-02	1214.34	38.39	1214.53	38.63	1217.23	38.81	1218.03	38.66	1216.37	38.48	1214.65	39.42	1214.63	39.73
R-03	1139.87		1139.84		1139.83		1139.87		1139.85		1139.80		1139.90	
O-02	1214.34	74.47	1214.53	74.69	1217.23	77.40	1218.03	78.16	1216.37	76.52	1214.65	74.85	1214.63	74.73
O-03	1198.52	58.65	1198.56	58.72	1209.52	69.69	1209.15	69.28	1216.75	76.90	1216.11	76.31	1216.16	76.26
R-04	1129.47		1129.30		1134.48		1133.10		1131.16		1129.70		1129.02	
O-03	1198.52	69.05	1198.56	69.26	1209.52	75.04	1209.15	76.04	1216.75	85.59	1216.11	86.41	1216.16	87.14
R-05	1113.45		1113.62		1117.17		1118.23		1116.15		1114.44		1114.64	
O-04	1227.74	114.29	1227.81	114.19	1229.64	112.47	1230.42	112.19	1228.47	112.32	1228.04	113.60	1228.13	113.49
R-06	1152.91		1153.03		1155.20		1156.20		1154.86		1153.77		1154.04	
O-04	1227.74	74.83	1227.81	74.78	1229.64	74.44	1230.42	74.21	1228.47	73.61	1228.04	74.27	1228.13	74.09
O-05	1222.40	69.49	1222.48	69.45	1224.23	69.03	1225.06	68.85	1224.09	69.23	1222.71	68.94	1222.70	68.66
R-07	1216.37		1216.56		1218.54		1219.64		1218.77		1217.03		1216.99	
O-05	1222.40	6.04	1222.48	5.91	1224.23	5.69	1225.06	5.42	1224.09	5.32	1222.71	5.68	1222.70	5.71
O-06	1221.05	4.68	1221.09	4.53	1222.90	4.35	1223.73	4.09	1222.81	4.04	1221.36	4.33	1221.28	4.29
R-08	1204.83		1207.38		1212.92		1210.11		1206.63		1207.55		1208.18	
O-06	1221.05	16.22	1221.09	13.71	1222.90	9.98	1223.73	13.62	1222.81	16.18	1221.36	13.81	1221.28	13.10
O-07	1221.43	16.60	1221.48	14.10	1223.27	10.35	1223.99	13.89	1223.12	16.49	1221.47	13.92	1221.54	13.36
Alert level is exceeded if gradient is less than 1 foot.														

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Table 3. Injection well pressures (psi)

Date	I-01			I-02			I-03			I-04			R-09			AL Max Inj Pressure
	AVG	MIN	MAX	AVG	MIN	MAX	AVG	MIN	MAX	AVG	MIN	MAX	AVG	MIN	MAX	
12/26/2021													13.93	9.21	19.09	113
12/27/2021													14.08	7.91	22.20	113
12/28/2021													27.98	21.64	34.14	113
12/29/2021													33.58	30.64	34.48	113
12/30/2021													29.93	22.75	32.25	113
12/31/2021													21.34	6.72	24.10	113
1/1/2022													8.03	6.38	9.58	113

I-01, I-02, I-03, and I-04 are currently operating as recovery wells.

FIGURES

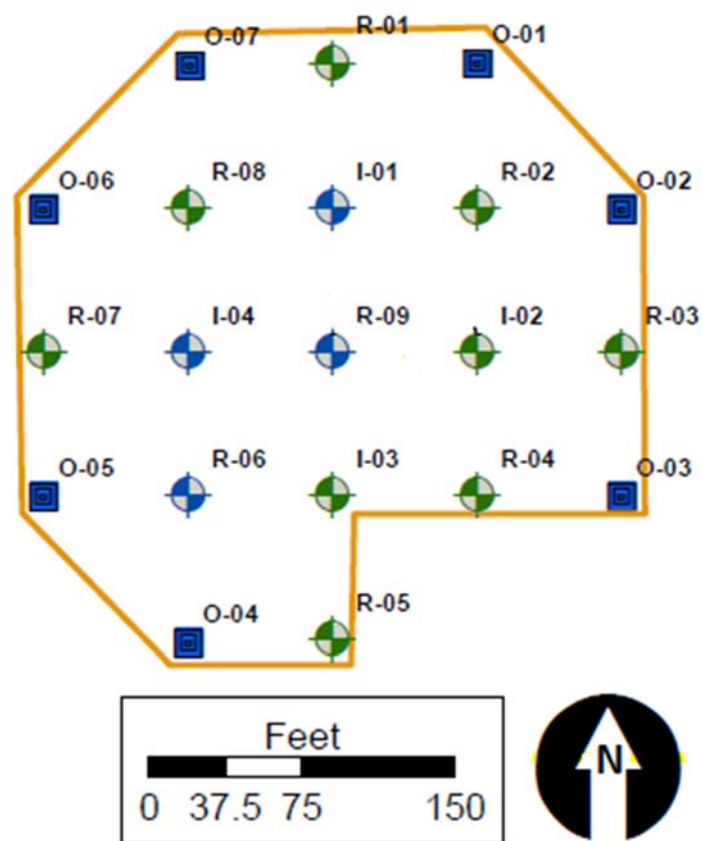


Figure 1. PTF injection, recovery, and observation well locations

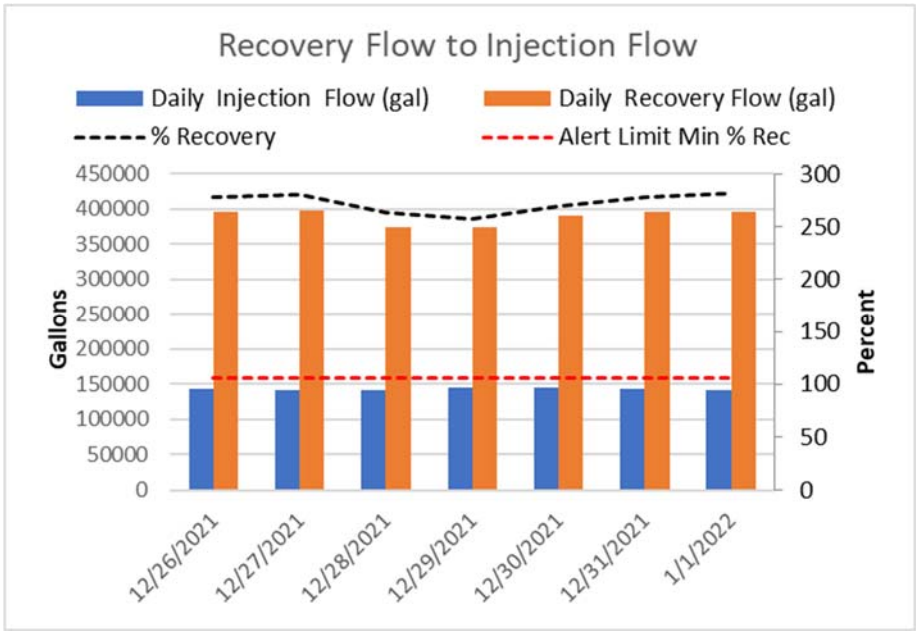


Figure 2. Recovered volume to injected volume

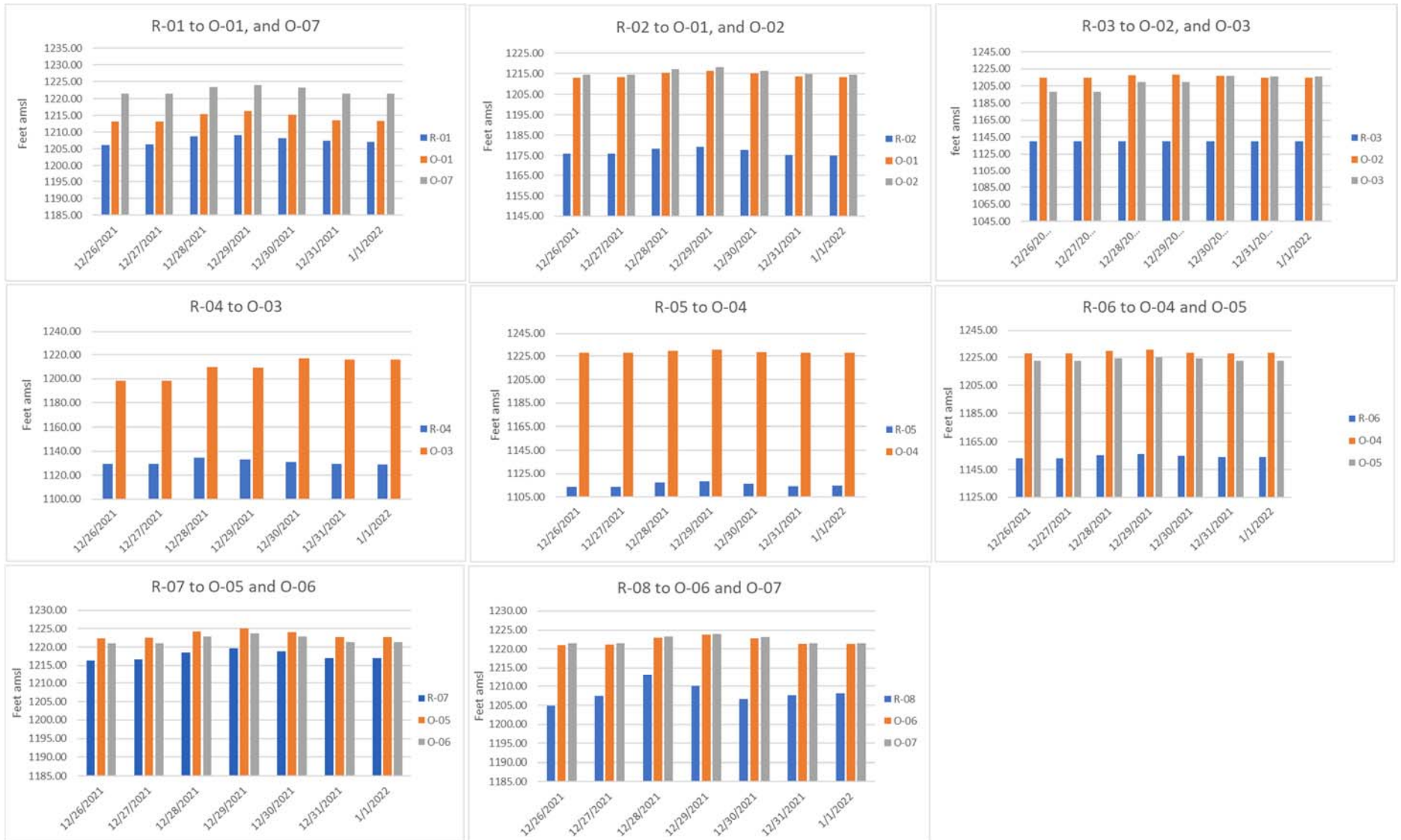


Figure 3. Recovery and observation well pairs.